WHAT WE CLAIM IS:

1. An anti-glare and anti-reflection film, which has a transparent support, and at least one low-refractive-index layer comprising a fluorine-containing resin and having a refractive index in the range from 1.38 to 1.49, wherein the anti-glare and anti-reflection film comprises an anti-glare layer that is disposed between the transparent support and the low-refractive-index layer and that contains a binder having a refractive index in the range from 1.57 to 2.00.

2. The anti-glare and anti-reflection film as claimed in claim 1, wherein said low-refractive-index layer contains a cured product that is cured by heat or ionizing radiation.

3. The anti-glare and anti-reflection film as claimed in claim 2, wherein said low-refractive-index layer has a dynamic friction coefficient of 0.03 to 0.15 and a contact angle of 90 to 120 degrees with water.

4. The anti-glare and anti-reflection film as claimed in claim 3, wherein said low-refractive-index layer contains ultra-fine particles of an inorganic oxide.

5. The anti-glare and anti-reflection film as claimed in claim 1, wherein said anti-glare layer comprises a binder containing matt fine particles and a cured product of a thermoplastic or ionizing radiation-curable resin.

6. The anti-glare and anti-reflection film as claimed in claim 5, wherein in said anti-glare layer, the average particle diameter of said matt fine particles is in the range between 1 to 10 μm.

7. The anti-glare and anti-reflection film as claimed in claim 5, wherein said binder of the anti-glare layer is a heat- or ionizing radiation-cured product of a mixture of a high-refractive-index monomer and a tri- or more-functional (meth)acrylate monomer.

8. The anti-glare and anti-reflection film as claimed in claim 5, wherein said binder of the anti-glare layer is a heat- or ionizing radiation-cured product of a mixture of ultra-fine particles of an oxide of at least one metal selected from Al, Zr, Zn, Ti, In, Sn and Sb, and a tri- or more-functional (meth)acrylate monomer.

9. The anti-glare and anti-reflection film as claimed in claim 5, wherein said binder of the anti-glare layer contains ultra-fine particles of an oxide of Zr, and an acrylate monomer mixture containing dipentaerythritol pentaacrylate and dipentaerythritol hexaacrylate.

10. A polarizing plate, comprising the anti-glare and anti-reflection film as claimed in any one of claims 1 to 9, as at least one of two protective films of a polarizing layer in the polarizing plate.

11. A liquid crystal display device, which comprises the anti-glare and anti-reflection film as claimed in any one of claims 1 to 9, with its anti-reflection layer being used as the outermost layer of the surface of the display.

12. A liquid crystal display device, which comprises an anti-reflection layer of the anti-glare and anti-reflection polarizing plate as claimed in claim 10, with its anti-reflection layer being used as the outermost layer of the surface of the display.

13. A polarizing plate, which has a polarizing layer held between two transparent supports, and which

comprises an optical compensation layer containing an optically anisotropic layer on one support among the transparent supports on the side opposite to the polarizing layer, and which comprises at least one anti-glare layer and at least one low-refractive-index layer in this order from the support side on another transparent support on the side opposite to the surface that is in contact with the polarizing layer,

wherein the optically anisotropic layer is a layer that comprises a compound having a discotic structure unit and has a negative birefringence, in which the disc planes of the discotic structure units are inclined to the surface of the transparent support at angles changing successively along the normal direction through the optically anisotropic layer.

14. The polarizing plate as claimed in claim 13, wherein the angles increase with the increase in distance of the optical anisotropic layer from the surface side of the support.

15 The polarizing plate as claimed in claim 13, wherein the optically anisotropic layer further contains a cellulose ester.

16. The polarizing plate as claimed in claim 13, wherein the transparent support on the side of the optically anisotropic layer has an optically negative uniaxiality, and has an optical axis in the normal direction of the surface of the transparent support, and satisfies the following equation:

$$20 \leqq \{(nx + ny)/2 - nz\} \times d \leqq 400$$

wherein **d** represents a thickness of the optical compensative layer (unit: nm), **nx**, **ny**, and **nz** represent main refractive indices of three orthogonal axes of the optical compensative layer, **nz** represents a main refractive index in the direction of thickness of the transparent support, and the axes satisfy a relation of $nx \leqq nz \leqq ny$, when it is viewed from the front.

17. The polarizing plate as claimed in claim 13, wherein an alignment layer is formed between the optically anisotropic layer and the transparent support.

18. The polarizing plate as claimed in claim 17, wherein the alignment layer comprises a film made of a cured polymer.

19. The polarizing plate as claimed in claim 13, wherein the optically anisotropic layer is a mono-domain or is formed of a number of domains having a size of 0.1 μm or less.

20. A polarizing plate, wherein one of two protective films of the polarizing plate is the anti-glare and anti-reflection film as claimed in any one of claims 1 to 9, and another protective film comprises an optical compensation layer containing an optically anisotropic layer on the support of said protective film on the side opposite to the support surface which is in contact with the polarizing layer, and

wherein the optically anisotropic layer is a layer which comprises a compound having a discotic structure unit and has a negative birefringence, in which the disc planes of the discotic structure units are inclined to the surface of the transparent support at angles changing successively along the normal direction through the optically anisotropic layer.

21. A liquid crystal display device comprising the polarizing plate in any one of claims 13 to 19 as a

display side polarizing plate among two polarizing plates disposed on both sides of a liquid crystal cell, in which the optically anisotropic layer is disposed towards the liquid crystal cell side.

22. A liquid crystal display device comprising the polarizing plate as claimed in claim 20 as a display side polarizing plate among two polarizing plates disposed on both sides of a liquid crystal cell, in which the optically anisotropic layer is disposed towards the liquid crystal cell side.

23. A color liquid crystal display device, which comprises a liquid crystal cell comprising a pair of substrates provided with a transparent electrode, a pixel electrode and a color filter, and a twisted nematic liquid crystal that is sealed between the pair of substrates, a pair of optical compensation sheets disposed on both sides of the liquid crystal cell, and a pair of polarizing plates disposed outside of the compensation sheets,

wherein the polarizing plate as claimed in any one of claims 13 to 19 is used, as the polarizing plate and the optical compensation sheet on the display side of the liquid crystal cell, in which the optically anisotropic layer is disposed towards the liquid crystal cell side,

and

wherein as the optical compensation sheet on the back light side of the liquid crystal cell, an optical compensation sheet provided with an optically anisotropic layer that comprises a compound having a discotic structure unit and has a negative birefringence is used, in which the disc planes of the discotic structure units are inclined to the surface of the transparent support at angles changing successively along the normal direction through the optically anisotropic layer.

24. A color liquid crystal display device, which comprises a liquid crystal cell comprising a pair of substrates provided with a transparent electrode, a pixel electrode and a color filter, and a twisted nematic liquid crystal that is sealed between the pair of substrates, a pair of optical compensation sheets disposed on both sides of the liquid crystal cell, and a pair of polarizing plates disposed outside of the compensation sheets,

wherein the polarizing plate as claimed in claim 20 is used, as the polarizing plate and the optical compensation sheet on the display side of the liquid crystal cell, in which the optically anisotropic layer is disposed towards the liquid crystal cell side, and

wherein as the optical compensation sheet on the

back light side of the liquid crystal cell, an optical compensation sheet provided with an optically anisotropic layer that comprises a compound having a discotic structure unit and has a negative birefringence is used, in which the disc planes of the discotic structure units are inclined to the surface of the transparent support at angles changing successively along the normal direction through the optically anisotropic layer.